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| MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204 | | | EXAMINER MOORE, IAN N | |
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DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/544,196

Applicant(s)

CHAN ET AL.

Examiner

Ian N. Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

Claim 1 recites the clause the optional language “**adapted to**” in line 5. The claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. Applicant is suggested to revise the claim, or clarify that the steps, which follows “adapted to”, to be performed are required (not optional).

Claim 1 recites “the **present utilization of said CPU**” in line 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites “the **utilization of said CPU**” in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites “the **incoming call caller**” in line 4-5. There is insufficient antecedent basis for this limitation in the claim.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7-25 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer (US 6,411,601) in view of Bauer (US006711129B1).

Regarding claim 1, Shaffer discloses a system for preventing overload of a gateway's resources (see FIG. 1-2, gatekeeper 10), said gateway including CPU (see FIG. 3, DSP resources) and other resources (see FIG. 3, Network Bandwidth, trunk line resources), said system comprising:

a Central Processing Unit (CPU) (see FIG. 3, DSP resources) and other resources (see FIG. 3, Network Bandwidth, trunk line resources),

said CPU being adapted to calculate a CPU utilization value that indicates the present utilization of said CPU (see FIG. 4, step 70, determining/calculating level/value of resources requirement for a present/received call request), said CPU utilization value being independent of the utilization of said other resources (see FIG. 3, DSP resources are independent/separate from network bandwidth and trunk line resources; camping on DSP resource only; see col. 3, line 6-14; see col. 7, line 41-55);

a call flag which is set by said CPU (see FIG. 4, step 74=Y, requirement unsatisfied=Y notification/indication/flag is set by DSP of a gatekeeper (see FIG. 2)) when the present CPU utilization value (see FIG. 4, step 72, setting level/value of available resources; see col. 6, line 55-69) is larger than the CPU utilization threshold (see col. 7, line 1-6; when require resource > available resource, unsatisfied notification/indication/flag is triggered/set, which indicates a unsatisfactory call software to accept or answer); and

means for detecting (see FIG. 2, resource mechanisms of gatekeeper 10) an incoming call (see FIG. 4; see col. 6, line 57-60; see col. 4, line 65 to col. 5, line 6; receiving a call/request),

and for indicating storing of the incoming call to the incoming call caller when the flag is set, (column 7, lines 8-12 and 15-20; the call is placed in a DSP resource queue).

Shaffer does not explicitly disclose a refusal and deny.

However, refusing/rejecting the call due to congestion indication is well known and established in the art. In particular, Bauer teaches a processor (see FIG. 1, a combined system of memory 130 and CPU 121) setting a call deny flag set by said CPU (see FIG. 2, step 213, 219, and 221; unsatisfied/reject or satisfy=NO notification/indication/flag set by a combined system of 130 and 121) when the present CPU utilization value is larger than the CPU utilization threshold (see FIG. 3, step 213 with NO, since request minimum acceptable resources is larger/greater than available resources, the requested resources can not be satisfied); see col. 5, line 25-40; see col. 7, line 1-12); said CPU utilization value being independent of the utilization of other resources (see col. 2, line 50-54; see col. 4, line 20-30; col. 6, line 60-67; CPU utilizing value "MIPS" are separated from other resources such as bandwidth, memory space) and

the processor detecting an incoming call (see FIG. 3, step 201, a new service request) and indicating- refusal of the incoming call to the incoming call caller without answering the incoming call when the deny flag is set (see FIG. 2, step 212,219,221; rejecting a new service request when unsatisfied/reject or satisfy=NO notification/indication/flag); see col. 5, line 25-40; see col. 7, line 1-12. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide refusal/rejection due to congestion indication, as taught by Bauer in the system of Bauer, so that it would control the utilization of resources in real time; see Bauer col. 3, line 4-20.

Regarding claims 3 and 24, Shaffer discloses a method for preventing overload (see FIG. 4, method) in a packet processing device receiving incoming telephone calls, said device including a gateway with a CPU and other resources (see FIG. 1-2, gatekeeper 10 receives telephone calls, and gatekeeper comprises a DSP/CPU, Network Bandwidth, trunk line resources), said method, comprising:

setting a Central Processing Unit (CPU) utilization threshold of a CPU of the gateway (see FIG. 4, step 72, determining and setting level of available resources; see col. 6, line 55-69; see col. 4, line 65 to col. 5, line 6);

when an incoming telephone call is received (see FIG. 4; see col. 6, line 57-60; see col. 4, line 65 to col. 5, line 6; receiving a call/request), comparing (see FIG. 4, step 74; comparing; see col. 6, line 55-69) a present CPU utilization value (see FIG. 4, step 70, level of resources requirement for a present call request) with the entered CPU utilization threshold (see FIG. 4, step 72, level of available resources), said CPU utilization value being independent of the utilization value of said other resources (see FIG. 3, DSP resources/values are independent/separate from network bandwidth and trunk line resources; camping on DSP resource only; see col. 3, line 6-14; see col. 7, line 41-55); and

indicating the incoming telephone call to a caller (see FIG. 4, sep 74=Y, requirement unsatisfied=Y notification/indication/flag is set) before the incoming telephone call is answered by the packet processing device (column 7, lines 8-12 and 15-20; the call is placed in a DSP resource queue) when the present CPU utilization value is larger than the threshold (see col. 7, line 1-6; when require resource > available resource, unsatisfied notification/indication/flag is triggered/set, which indicates a unsatisfactory call software to accept or answer).

Shaffer does not explicitly disclose a refusal and deny.

However, refusing/rejecting the call due to congestion indication is well known and established in the art. In particular, Bauer teaches a processor (see FIG. 1, a combined system of memory 130 and CPU 121) setting a call deny flag (see FIG. 2, step 213, 219, and 221; unsatisfied/reject or satisfy=NO notification/indication/flag) when the present CPU utilization value is larger than the CPU utilization threshold (see FIG. 3, step 213 with NO, since request minimum acceptable resources is larger/greater than available resources, the requested resources can not be satisfied); see col. 5, line 25-40; see col. 7, line 1-12); said CPU utilization value being independent of the utilization of other resources (see col. 2, line 50-54; see col. 4, line 20-30; col. 6, line 60-67; CPU utilizing value "MIPS" are separated from other resources such as bandwidth, memory space) and

the processor detecting an incoming call (see FIG. 3, step 201, a new service request) and indicating refusal of the incoming telephone call to the incoming call caller without answering the incoming call when the deny flag is set (see FIG. 2, step 212,219,221; rejecting a new service request when unsatisfied/reject or satisfy=NO notification/indication/flag); see col. 5, line 25-40; see col. 7, line 1-12. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide refusal/rejection due to congestion indication, as taught by Bauer in the system of Bauer, so that it would control the utilization of resources in real time; see Bauer col. 3, line 4-20.

Regarding claims 7 and 28, the combined system of Shaffer and Bauer discloses all limitation as set forth above in claim 1. Shaffer further discloses gauging software (see FIG. 2, software within gatekeeper 10 such as resource availability monitor 42), and Shaffer also

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discloses at least answer the call by accept the incoming call to place in a queue (see col. 7, lines 8-12 and 15-20; the call is accepted and placed in a DSP resource queue 52). Bauer discloses call refusing software (see FIG. 1, admission controller 120 software) refusing the incoming call without answering the incoming call (see FIG. 2, step 212,219,221; rejecting a new service request when unsatisfied/reject or satisfy=N0 notification/indication/flag); see col. 5, line 25-40; see col. 7, line 1-12). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide refusal/rejection due to congestion indication, as taught by Bauer in the system of Bauer, for the same motivation as set forth above in claim 1.

Regarding claim 15, the combined system of Shaffer and Bauer discloses all limitation as set forth above in claim 1. Shaffer further discloses the processor configured to detect a received incoming call (see FIG. 2, FIG. 4; see col. 6, line 57-60; see col. 4, line 65 to col. 5, line 6; resource mechanisms of gatekeeper 10 detects/receives a call/request) and configured to at least answer the call, accept the incoming call to placed in a queue (see col. 7, lines 8-12 and 15-20; the call is accepted and placed in a DSP resource queue 52). Bauer also discloses deny the incoming call (see FIG. 2, step 212,219,221; rejecting a new service request when unsatisfied/reject or satisfy=N0 notification/indication/flag); see col. 5, line 25-40; see col. 7, line 1-12). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide refusal/rejection due to congestion indication, as taught by Bauer in the system of Bauer, for the same motivation as set forth above in claim 1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide refusal/rejection due to congestion indication, as taught by Bauer in the system of Bauer, for the same motivation as set forth above in claim 1.

Regarding claims 2, 4, 16 and 25, the combined system of Shaffer and Bauer discloses all limitations. Shaffer discloses wherein the CPU utilization threshold is set to a value of available processing capacity of the gateway to ensure calls currently established on the gateway have access to additional gateway processing resources (see col. 6, line 55-69; see col. 4, line 65 to col. 5, line 6). Setting resource requirements, including processing resources (CPU utilization value), to a value lower than the maximum available so as to prevent the processor from working at 100% capacity so as to leave some processor capacity as a reserve is well known and established in the art.

In particular, Bauer discloses wherein the CPU utilization threshold is set to a value below (see col. 6, line 63 to col. 7, line 1-6; 94 MIPS) a total available processing capacity of the gateway (see col. 6, line 63 to col. 7, line 1-6; 100 MIPS) to ensure calls currently established on the gateway have access to additional gateway processing resources (see col. 6, line 63 to col. 7, line 1-6; $100-94=6$ MIPS; to ensure the reserve/additional resource of 6 MIPS).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide refusal/rejection at lower threshold than total capacity, as taught by Bauer in the system of Bauer, for the same motivation as stated above in claims 1, 3, 7, 24 and 28.

Regarding claim 8, 10, 11, 18, 19, and 29, Shaffer discloses the incoming call input sets a ring flag (see FIG. 4; see col. 6, line 57-60; column 6, line 57 - column 7, line 4; see col. 4, line 65 to col. 5, line 6; a ring/call request/notification/indication/flag is set/triggers) when a new incoming telephone call is received (see FIG. 4; see col. 6, line 57-60; see col. 4, line 65 to col. 5, line 6; receiving a call/request), and the present CPU utilization value input is updated when

the ring flag is set (see FIG. 4, step 70 determines/updates the DSP resources requirement specified in a call request request/notification/indication/flag). Bauer also discloses the incoming call input sets a ring flag when a new incoming telephone call is received (see FIG. 2, step 201; setting a new call request/ring notification/indication/flag when a new call request/ring is received), and the present CPU utilization value input is updated when the ring flag is set (see FIG. 2, step 203; determining/updating the request utilization MIPS/resources; see col. 5, line 20-40; see col. 6, line 60 to col. 7, line 12).

Regarding claims 9 and 17, Shaffer discloses wherein the CPU utilization threshold is set to a pre-specified percent of the total available processing capacity of the gateway (column 6, lines 57-63; in order to have any optimal characteristics, Shaffer faced the same tradeoff between sound quality and call volume, and thus Shaffer must set the processing threshold to a pre-specified percentage). Bauer also discloses the CPU utilization threshold is set to about a pre-specified percent of the total available processing capacity of the gateway (see col. 6, line 63 to col. 7, line 1-6).

Regarding claims 12 and 20, the combined system of Shaffer and Bauer discloses all limitations. Shaffer discloses wherein the processor detects a ring signal for the incoming call (see FIG. 4; see col. 6, line 57-60; column 6, line 57 - column 7, line 4; see col. 4, line 65 to col. 5, line 6; a ring/call request/notification/indication/signal is set/triggers) and determines the incoming call prior to answering the ring signal (column 7, lines 8-12 and 15-20; see FIG. 4, decision step 74 in which the resource availability monitor 42 determines whether the required level of any resource specified in the call request is above the corresponding availability level for the network resource). Bauer also discloses the processor detects a ring signal for the incoming

call and determines whether or not to refuse the incoming call prior to answering the ring signal (see FIG. 2-3, see col. 5, line 1-65; see col. 7, line 1-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide determining whether to refuse the call, as taught by Bauer in the system of Bauer, for the same motivation as stated above in claims 1, 3, 7, 24 and 28.

Regarding claim 13 and 21, Shaffer discloses refusing the incoming call by generating a busy signal (see col. 7, line 8-20; in the event that a call request specifies a requested network resource level above the corresponding availability levels, a resource reservation mechanism 46 is invoked, and the call may be placed in a DSP resource queue). Bauer also discloses refusing the incoming call by generating a busy signal (see FIG. 2, step 221, notification to the user; see col. 5, line 30-40).

Regarding claim 14 and 22, Bauer discloses the processor does not place refused calls in a queue (see FIG. 2, see col. 5, line 30-40; no queues to store call). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide refusal/rejection at lower threshold than total capacity, as taught by Bauer in the system of Bauer, for the same motivation as stated above in claims 1, 3, 7, 24 and 28.

Regarding claim 23, Shaffer the call may be placed in a DSP resource queue (places accepted calls in a queue) (column 7, lines 15-20).

4. Claims 5, 6, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Bauer, as described above in claims 3 and 24, and further in view of Grewal (US005592672A).

Regarding claims 5 and 26, the combined system of Shaffer and Bauer discloses determining a CPU utilization threshold for a CPU as described above in claims 3 and 24.

Neither Shaffer nor Bauer expressly discloses a bank of CPUs. However, having plurality of CPUs or bank of CPUs in the system is well known and established in the art. Grewal discloses determining and distributing in a bank of CPUs (see FIG. 2, plurality of processors 30 and 32 for processing the calls; see col. 4, line 10-26) Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to plurality of CPUs, as taught by Grewal in the system of Grewal, so that it would balance the outgoing load; see Grewal col. 3, line 29-50; and by having more than one CPU, it would increase the processing capacity and capability.

Moreover, having a bank of CPUs does not define a patentable distinct over that in the combined system since both invention as a whole and the combined system are directed to processing the calls. The degree in which having a bank of CPUs presents no new or unexpected results. If one has one CPU, it will be provide processing capacity and capability, and if one has more than one CPU (i.e. bank of CPUs), it will provide more processing capacity and capability. Therefore, to have a bank of CPUs that process the calls would have been routine experimentation and optimization in the absence of criticality.

Regarding claims 6 and 27, Bauer disclose setting command, and saving an aspect of the setting command in the memory (see FIG. 2, memory 130; see col. 4, line 40-46; see col. 5, line 20-30). The combined system of Shaffer, Bauer and Grewal may have selected anyone of a variety of memory devices, including an NVRAM, to prevent the loss of information when

power is lost since it would be impossible to manually enter the instruction every time there is power lost.

Response to Arguments

5. Applicant's arguments filed 8/16/2006 have been fully considered but they are not persuasive.

Regarding claims 1-29, the applicant argued that, "...In summary, applicant's system determine if the CPU utilization is above a certain threshold and if it is, the call is refused. In Shaffer's system, if sufficient resources are not available, a request to reserve the resources is made and the reservation process repeats until sufficient resources are available..." see page 11, paragraph 2.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the rejection is based upon the combination of Shaffer and Bauer, and thus examiner **respectfully disagrees** with the argument above since the combined system of Shaffer and Bauer discloses the argued limitation.

Shaffer discloses a call flag which is set by said CPU (see **FIG. 4, sep 74=Y, requirement unsatisfied =Y notification/indication/flag is set by DSP of a gatekeeper (see FIG. 2))** when the present CPU utilization value (see **FIG. 4, step 72, setting level/value of available resources; see col. 6, line 55-69**) is larger than the CPU utilization threshold (see **col. 7, line 1-6; when require resource > available resource, unsatisfied**

notification/indication/flag is triggered/set, which indicates a unsatisfactory call software to accept or answer).

Bauer teaches a processor (see FIG. 1, a combined system of memory 130 and CPU 121) setting a call deny flag set by said CPU (see FIG. 2, step 213, 219, and 221; unsatisfied/reject or satisfy=NO notification/indication/flag set by a combined system of 130 and 121) when the present CPU utilization value is larger than the CPU utilization threshold (see FIG. 3, step 213 with NO, since request minimum acceptable resources is larger/greater than available resources, the requested resources can not be satisfied); see col. 5, line 25-40; see col. 7, line 1-12).

Thus, it is clear that the combined system of Shaffer and Bauer discloses the claimed invention.

Regarding claims 1-29, the applicant argued that, “...there is no point in [Shaffer] process at which a call is refused as in the applicant’s system. If processes are not available, the process loops until the recourses are available [in Shaffer]...” see page 11, paragraph 1.

In response to applicant's argument, the examiner respectfully disagrees with the argument above.

In general, when present CPU utilization value input (i.e. request value) is larger than a number of aspects of a CPU utilization threshold input (i.e. threshold value), the applicant invention deals with either “refusing a call” (labeled with A) or “accepting the call for placing in a queue”(labeled with B) as set forth below in claim 28.

Claim 28 recites, “...setting a deny flag when a number aspect of the present CPU utilization value input is larger than a number of aspect of a CPU utilization threshold input...refusing the incoming call without answering the incoming call A or accepting the

incoming call for placement in a queue B when the deny flag is set..." in lines 8-12. [Emphasis added]

Applicant argues (only base on Shaffer) that the claimed invention is directed to refusing a call (i.e. part A only), yet in applicant's claims 16, 25 and 28 clearly recite what Shaffer discloses: accepting the unanswered calls are placing in a queue during (i.e. part B) when present CPU utilization value input (i.e. request value) is larger than a number of aspect of a CPU utilization threshold input (i.e. threshold value), in col. 7, lines 8-12 and 15-20 and as set forth above.

This is clear that Shaffer discloses the "accepting the unanswered calls are placing in a queue" (part B), while Bauer discloses, "refusing a call" (part A). Thus, it is clear that the applicant performing a piecemeal analysis of Shaffer and Bauer references, while combined system of Shaffer and Bauer discloses entire applicant's claimed invention.

Regarding claims 1-29, the applicant argued that, "...Bauer does not make decision based upon CPU utilization. In Bauer, a measure of "available system resources" is computed "by summing the resource utilization of each active task"...Bauer does not teach the desirability of making decision to reject a call based solely on the fact the CPU utilization value is above a certain value..." see page 11, paragraph 3-5.

In response to applicant's argument, the examiner respectfully disagrees with the argument above. Bauer make decision based upon CPU utilization discloses since Bauer discloses call (see FIG. 3, step 201, a new service request) should be refused (see FIG. 2, step 212,219,221; rejecting a new service request when unsatisfied/reject or satisfy=N0 notification/indication/flag) if the CPU utilization is above a certain threshold (see FIG. 3, step

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213 with NO, since request minimum acceptable resources is larger/greater than available resources, the requested resources can not be satisfied); see col. 5, line 25-40; see col. 7, line 1-12); see col. 5, line 25-40; see col. 7, line 1-12.

In response to applicant's argument that the references fail to show certain features of applicant's invention, none of the claims recites any specific steps of how available system resources measured, and thus the arguments related to unclaimed limitations are irrelevant. I is noted that the features upon which applicant relies (i.e., **by summing the resource utilization of each active task**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding argument on Bauer with "based solely on the fact the CPU utilization value", since Shaffer also already discloses all based solely on the fact the CPU utilization value as set, Bauer is not required to discloses based solely on the fact the CPU utilization value.

In particular, Shaffer discloses where said CPU utilization value being independent of the utilization of said other resources (see FIG. 3, DSP resources are independent/separate from network bandwidth and trunk line resources; camping on DSP resource only; see col. 3, line 6-14; see col. 7, line 41-55).

Shaffer discloses " a method with DSP resources only" in col. 3, line 6-14 as follows:

In one embodiment, **the method is utilized to camp on to DSP resources only**. The DSP requirements for a voice-over-data-network call are determined and compared to a level of available DSP resources. A reservation for the required DSP resources is requested if the required DSP resources exceed the available DSP resources, and the voice-over-data-network call is established when the level of available DSP resources meets the required quantities of DSP resources. (Emphasis added)

Although it is not required, Bauer still discloses, “decision to reject a call based solely on the fact that CPU utilization is above a certain value” as set forth below.

If the measure of the available system resources indicates that the minimum required resource level cannot be provided, then the incoming service request is rejected; otherwise, the incoming service request is accepted. For example, if the measure of available resources is 50 MIPS and the minimum resource level of the incoming request requires 65 MIPS, the incoming service request will be declined, even though 50 MIPS may be able to support the service, but at an unacceptable, low level. (*see Bauer col. 3, line 1-6*)

The same problem exists in data processing environments, wherein bandwidth in a communication channel, **processing time in a CPU, and/or** other system resources are shared. In the present invention, an efficient, a real-time admission control scheme is provided which is applicable in the above-described situations.

For example, if each telephone call passing through a particular server requires 4 MIPS, and each conference call requires 10 MIPS per participant, then 16 calls and 1 three-way conference call would consume 94 MIPS. In the same example, assume further that the particular server can handle 100 MIPS.

In this example, in accordance with the principles of the present invention, a request for a new telephone call will be accepted, but a request to add another user to the existing conference will be rejected because the real-time measurement of system resources utilization indicates that addition of a PSTN call will result in $94+4=98$ MIPS (<100) **utilization** and the available acceptable resource level is 100 MIPS. But the addition of another user to the existing conference will be declined, because this addition will result in $94+10=104$ MIPS (>100) total resource utilization indicating that the required resource level is not available. (*see Bauer col. 6, line 56 to col. 7, line 10*) [Emphasis added]

In view of above, Bauer’s teaches utilizing “solely” CPU processing time (i.e. CPU/DSP utilization) for determination as applicant can evident from the language “**or**”. Moreover, Bauer discloses the total resource of CPU/DSP utilization, measured in MIPS (Million Instructions Per Second), which is a unit used to measure the speed at which a processor/CPU executes instructions (see previously attached Newton’ Telecom Dictionary). It is also clear that Bauer also make decision to reject a call based solely on CPU utilization or MIPS is above a certain level.

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Thus, the combined system of Shaffer and Bauer discloses the argued claimed invention as set forth above.

Conclusion

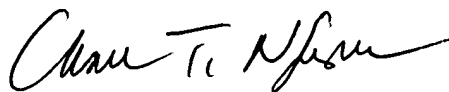
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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gwm

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8-28-06



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